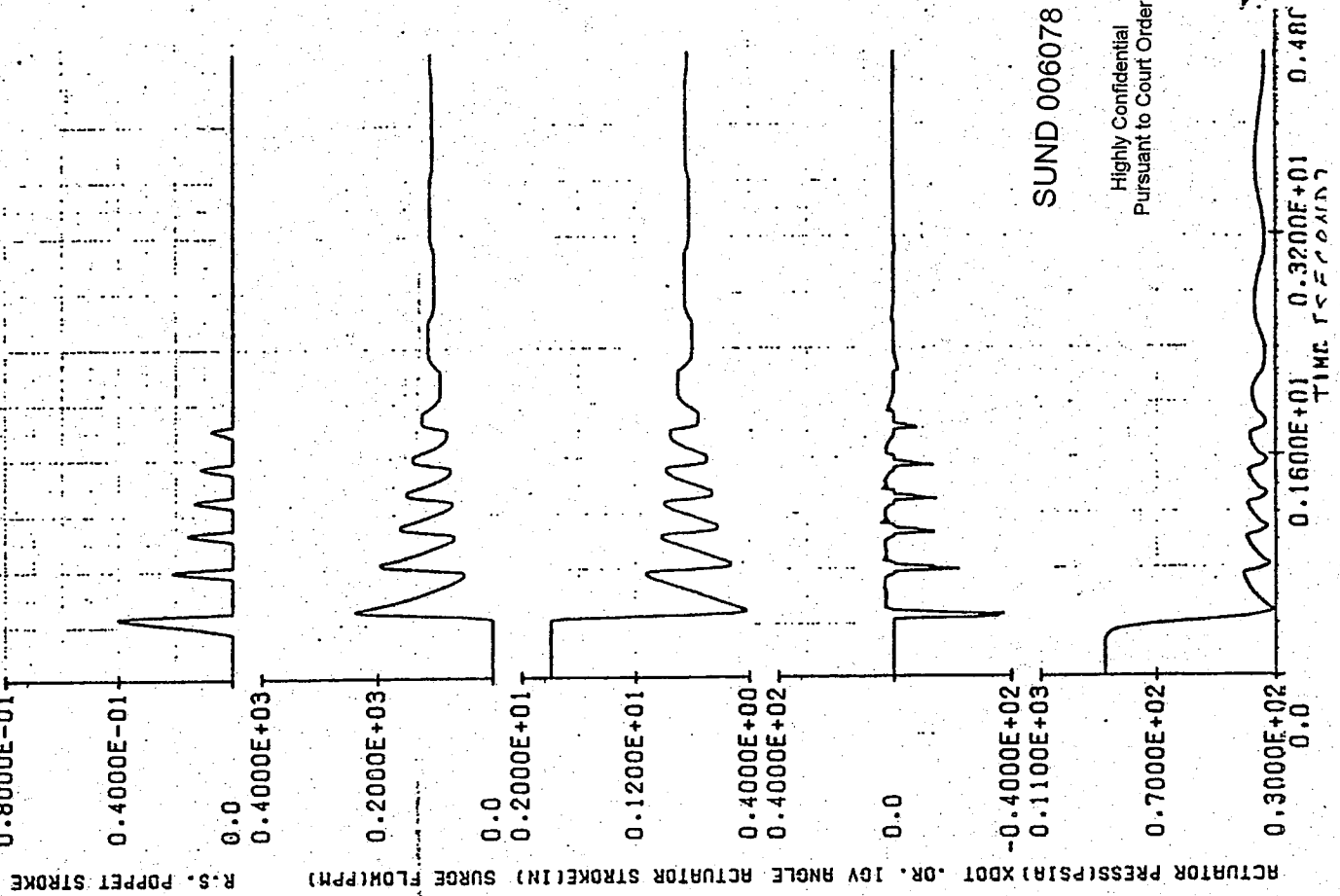
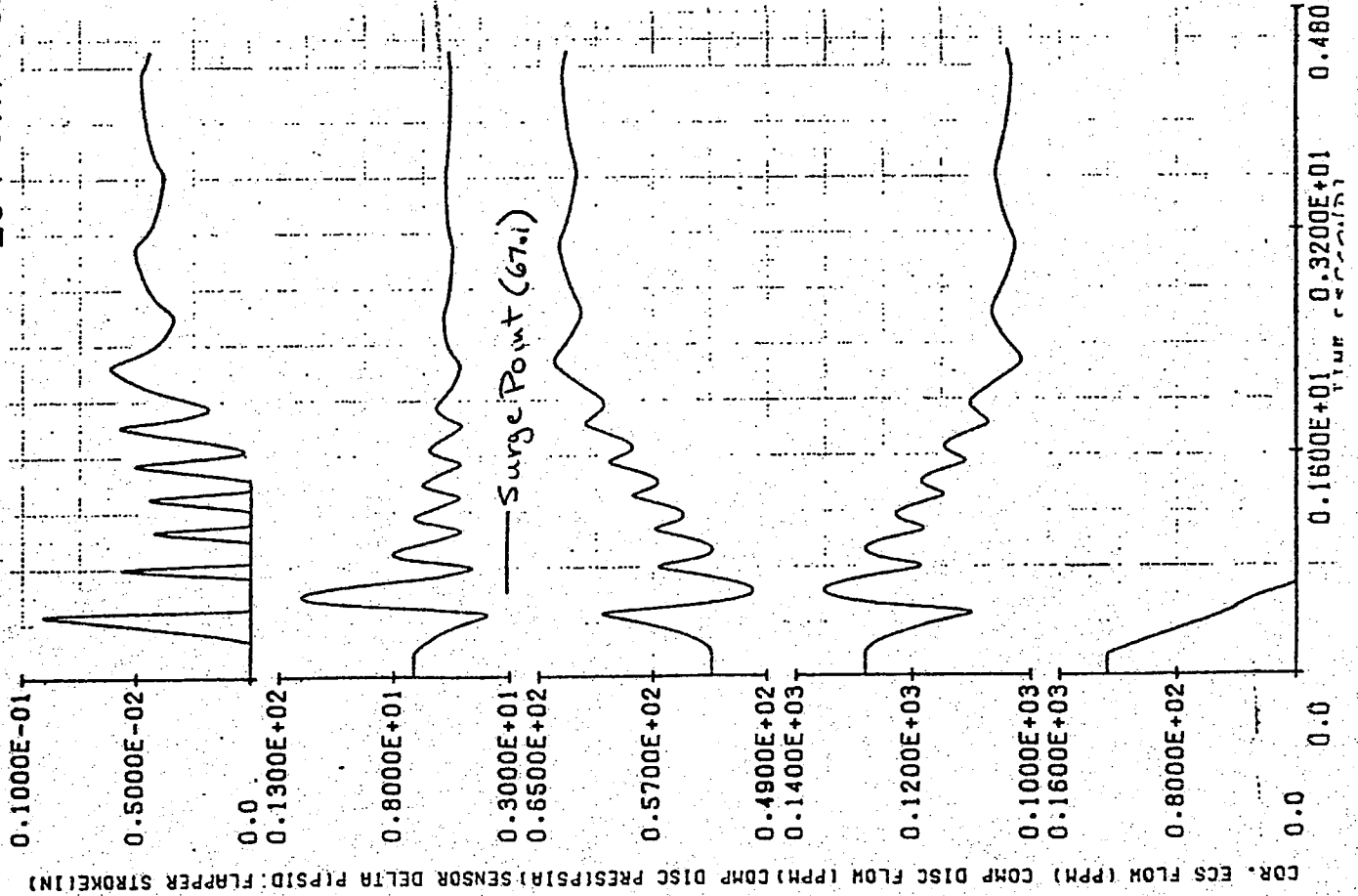


# EXHIBIT 27

## PART II

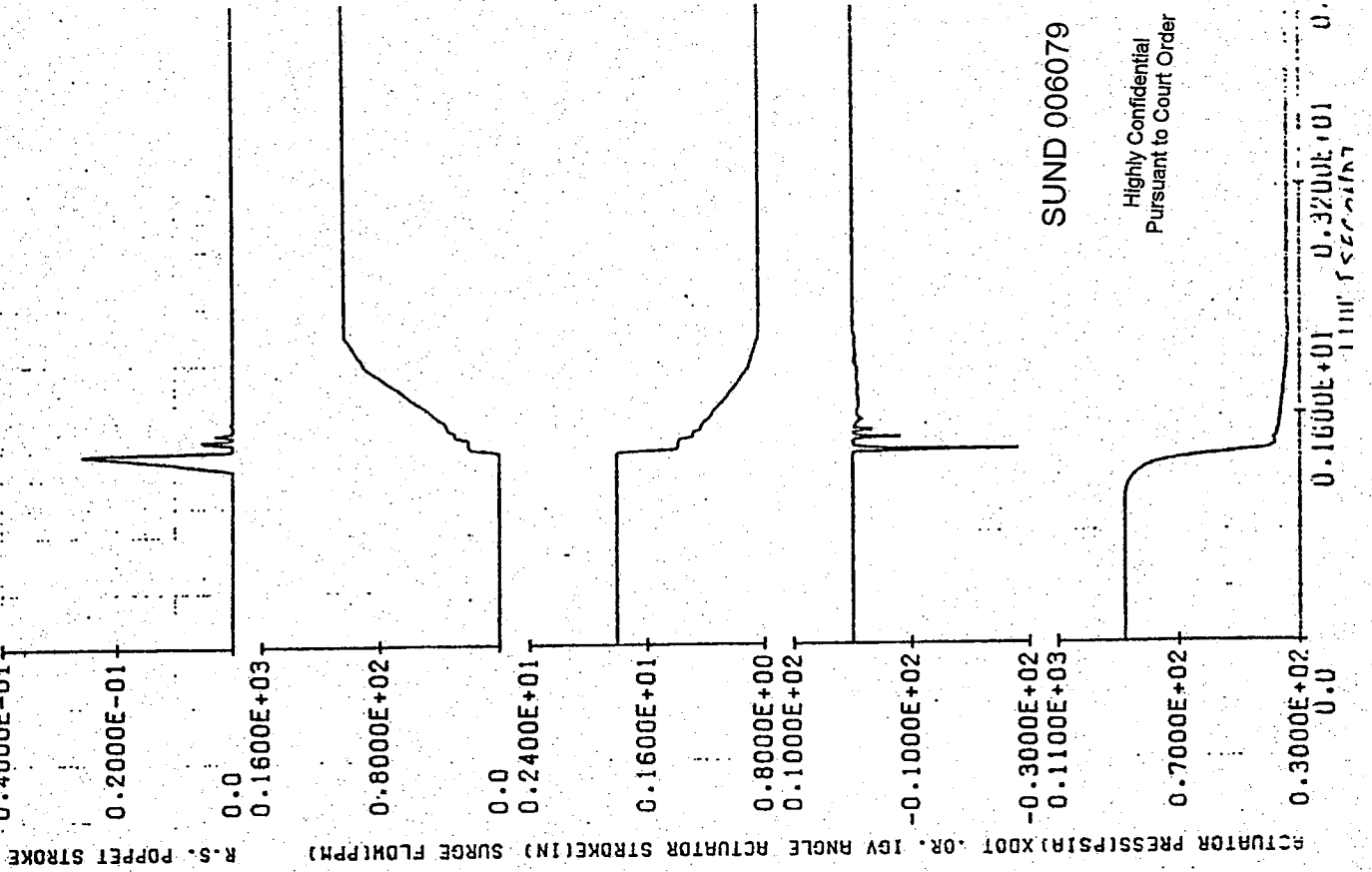
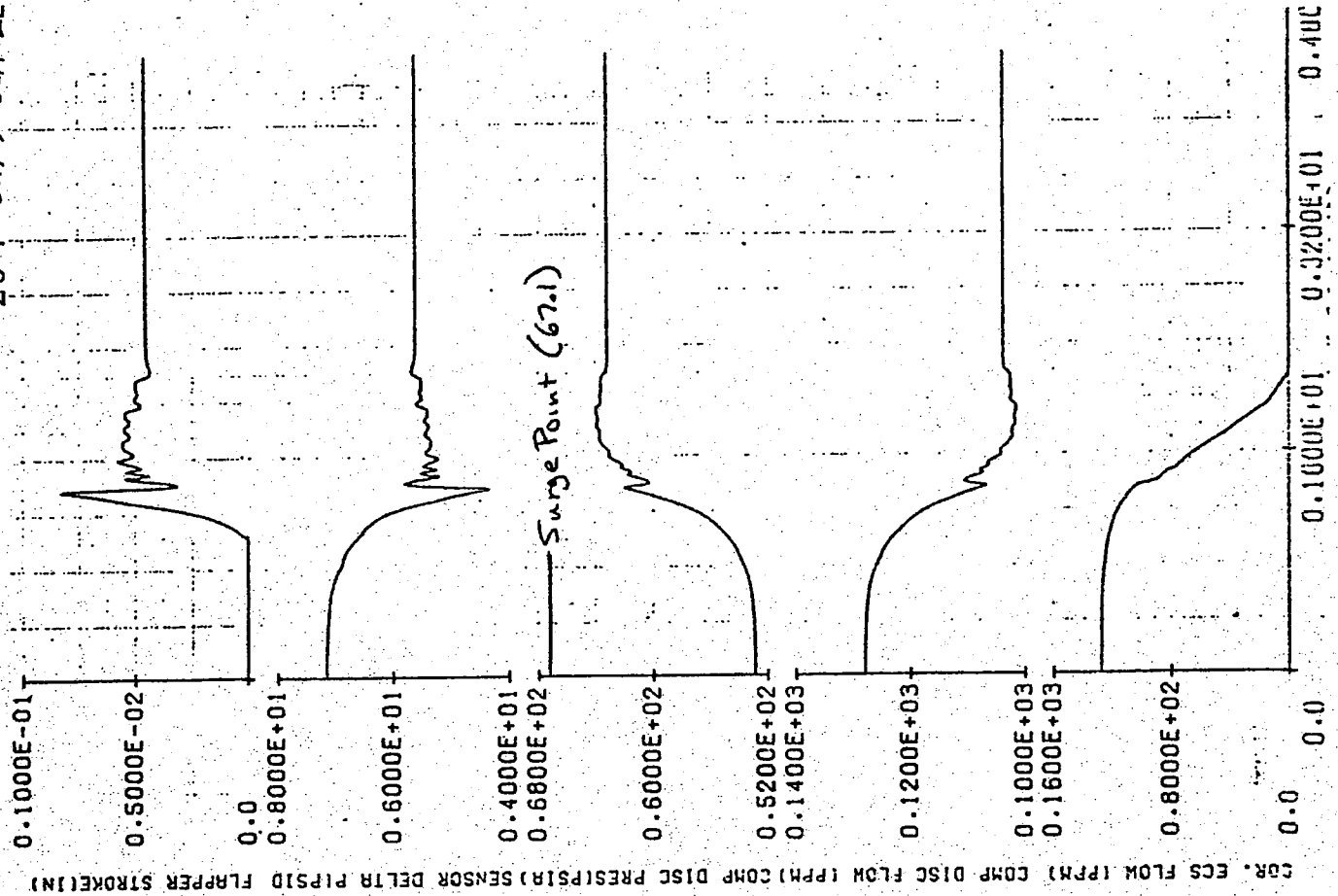
FIGURE 14. TWO PACK ECS FLOW SHUTOFF TRANSIENT  
-25°F DAY, SEA LEVEL, MAX. MODE



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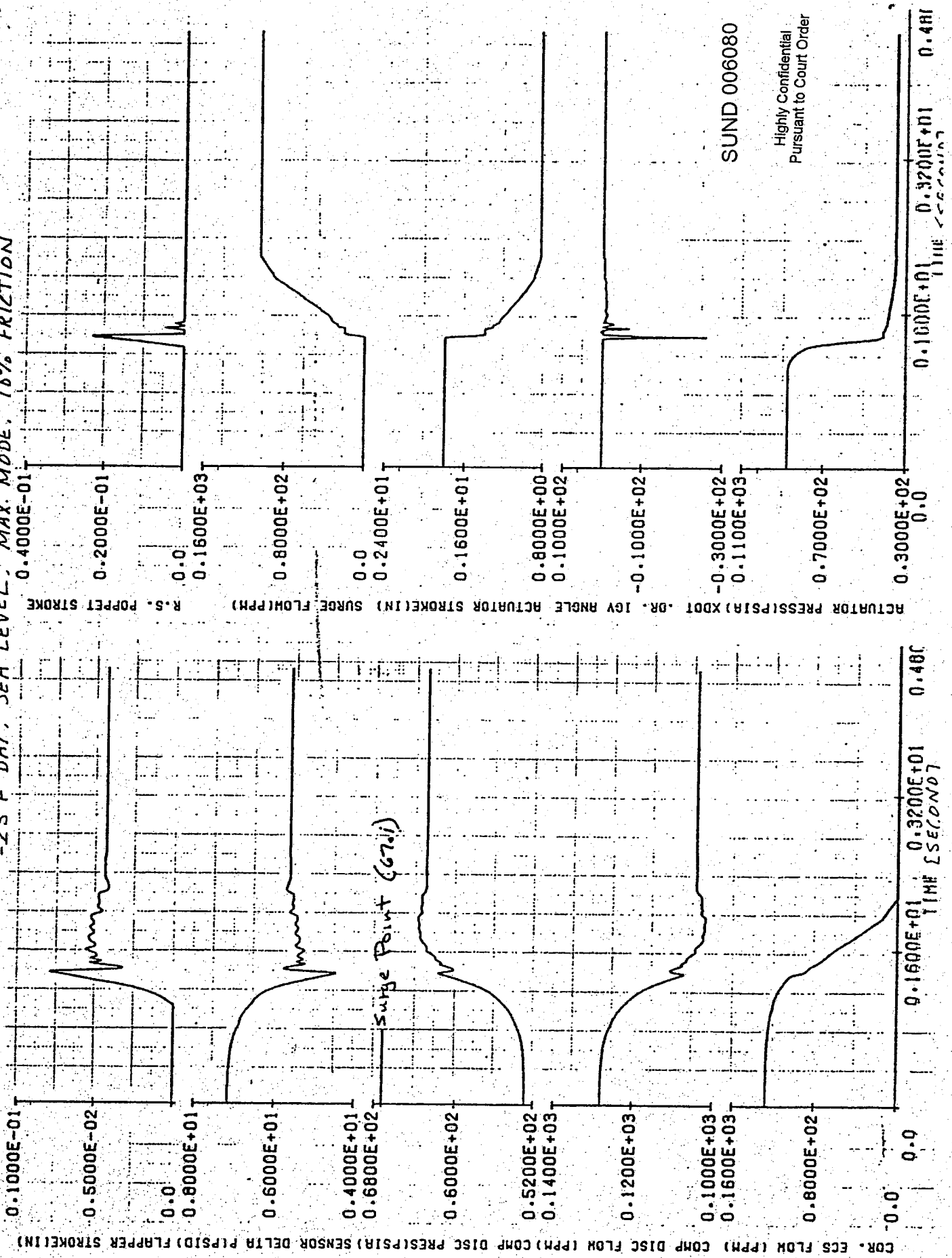
FIGURE 15. APU ISOLATION VALVE TURN OFF TRANSIENT  
-25°F DAY, SEA LEVEL, MAX. MODE



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FIGURE 16. APU ISOLATION VALVE TURNOFF TRANSIENT  
-25°F DAY, SEA LEVEL, MAX. MODE, 10% FRICTION



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FIGURE 17. APU ISOLATION VALVE TURNOFF TRANSIENT  
-25°F DAY, SEA LEVEL, MAX. MODE, 150% FRICTION

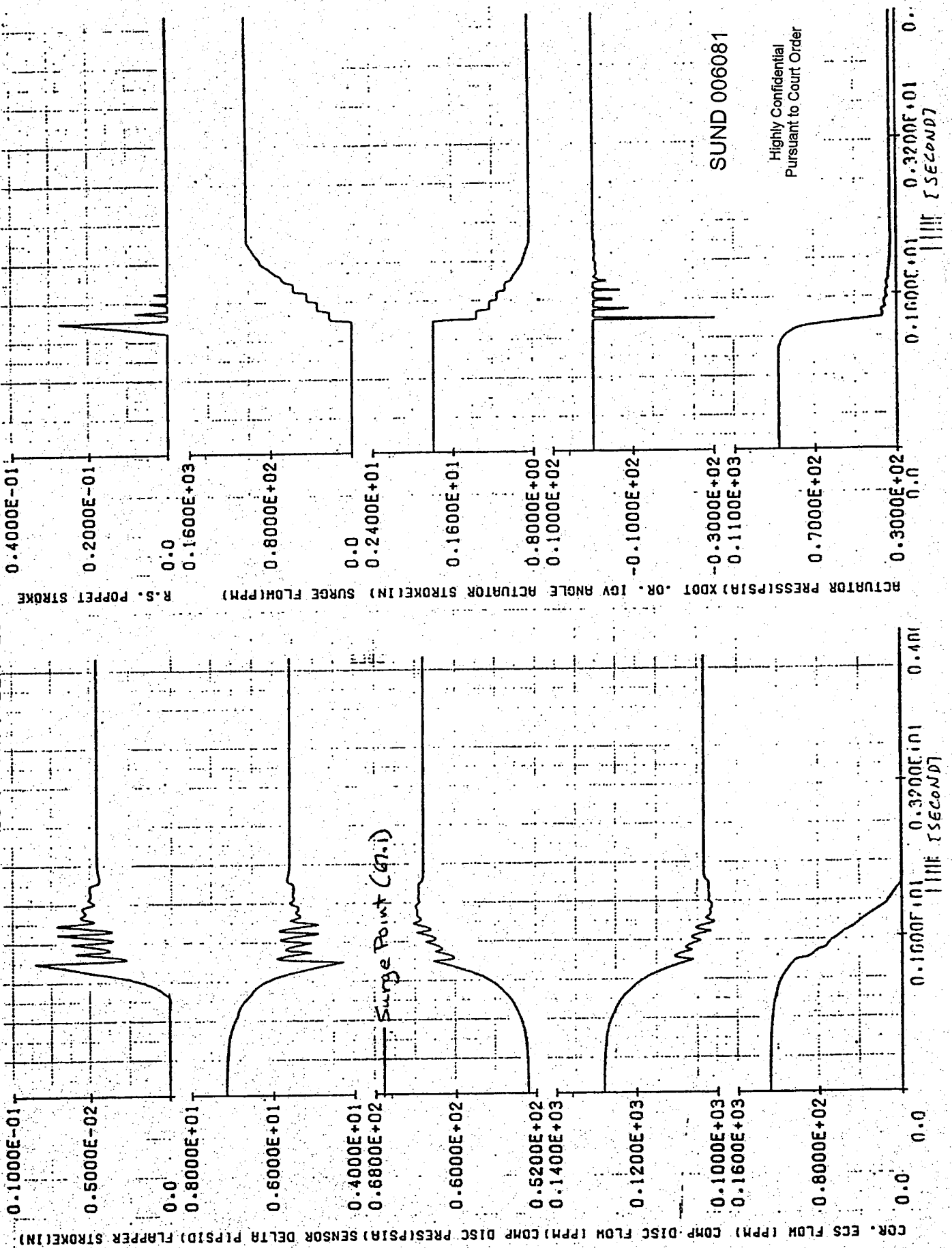


FIGURE 18. TWO ATM FLOW SHUTOFF TRANSIENT  
130°F DAY, SEA LEVEL, MAX. MODE

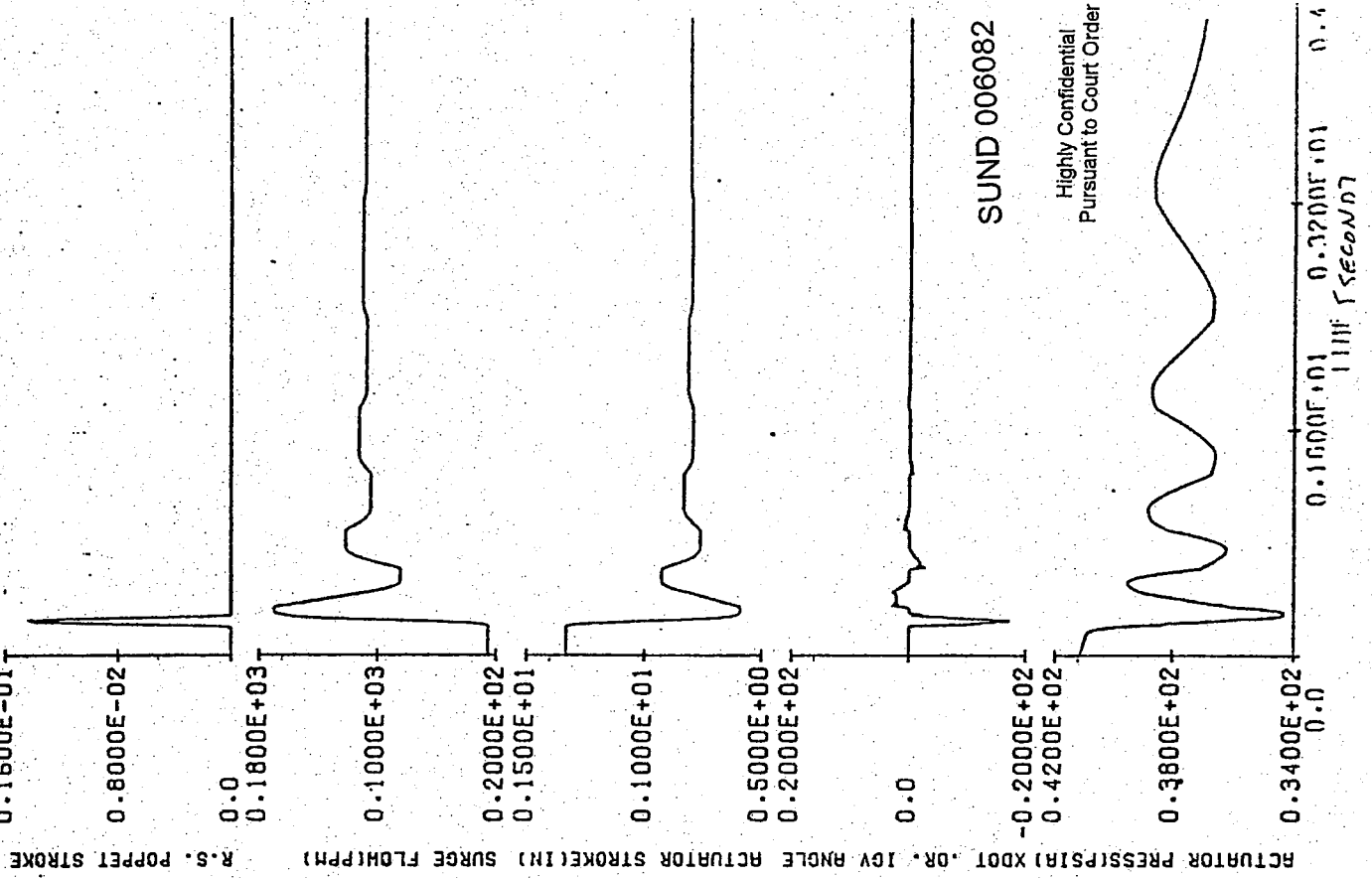
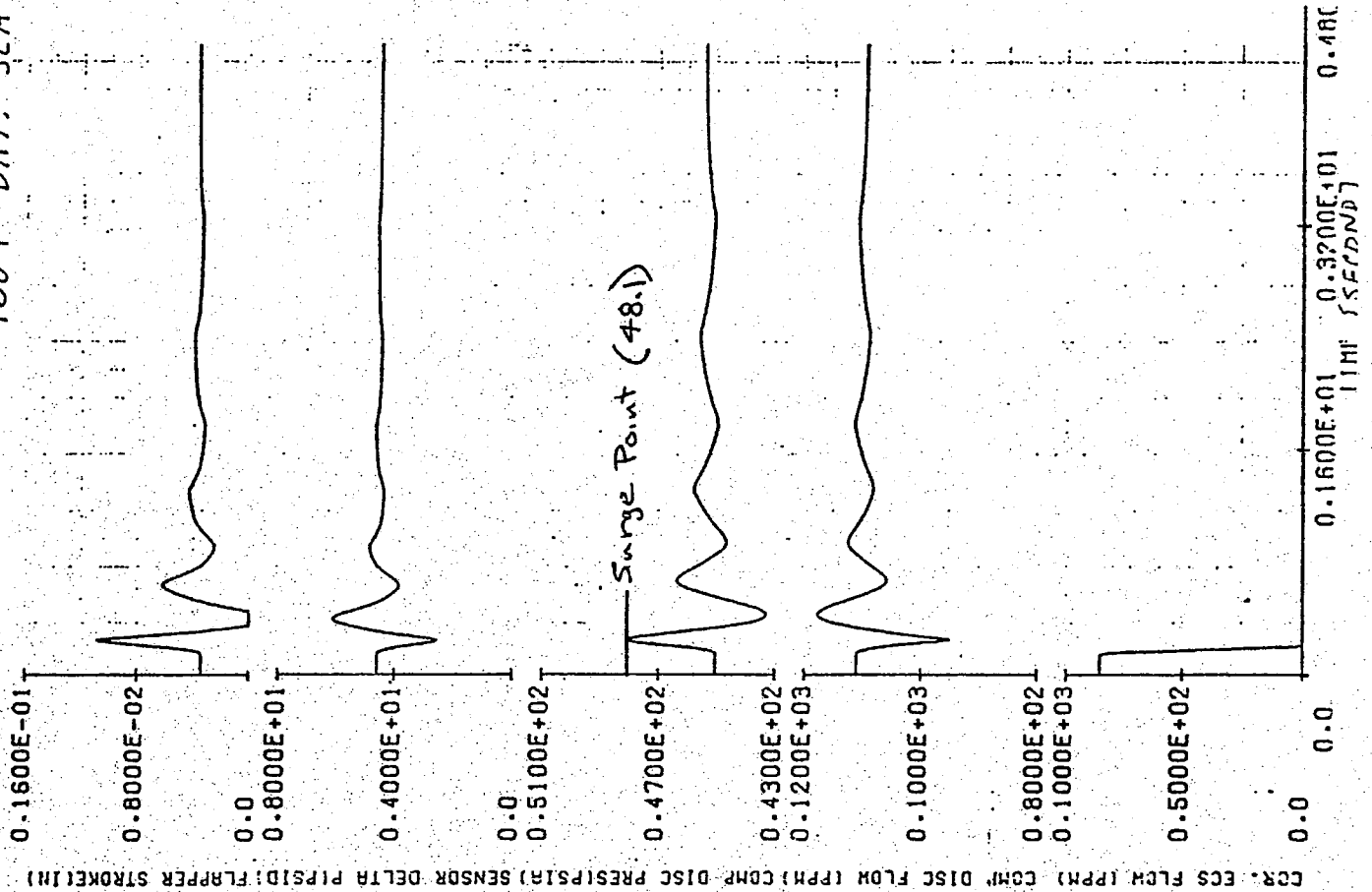


FIGURE 19. ONE PACK ECS FLOW SHUTOFF TRANSIENT

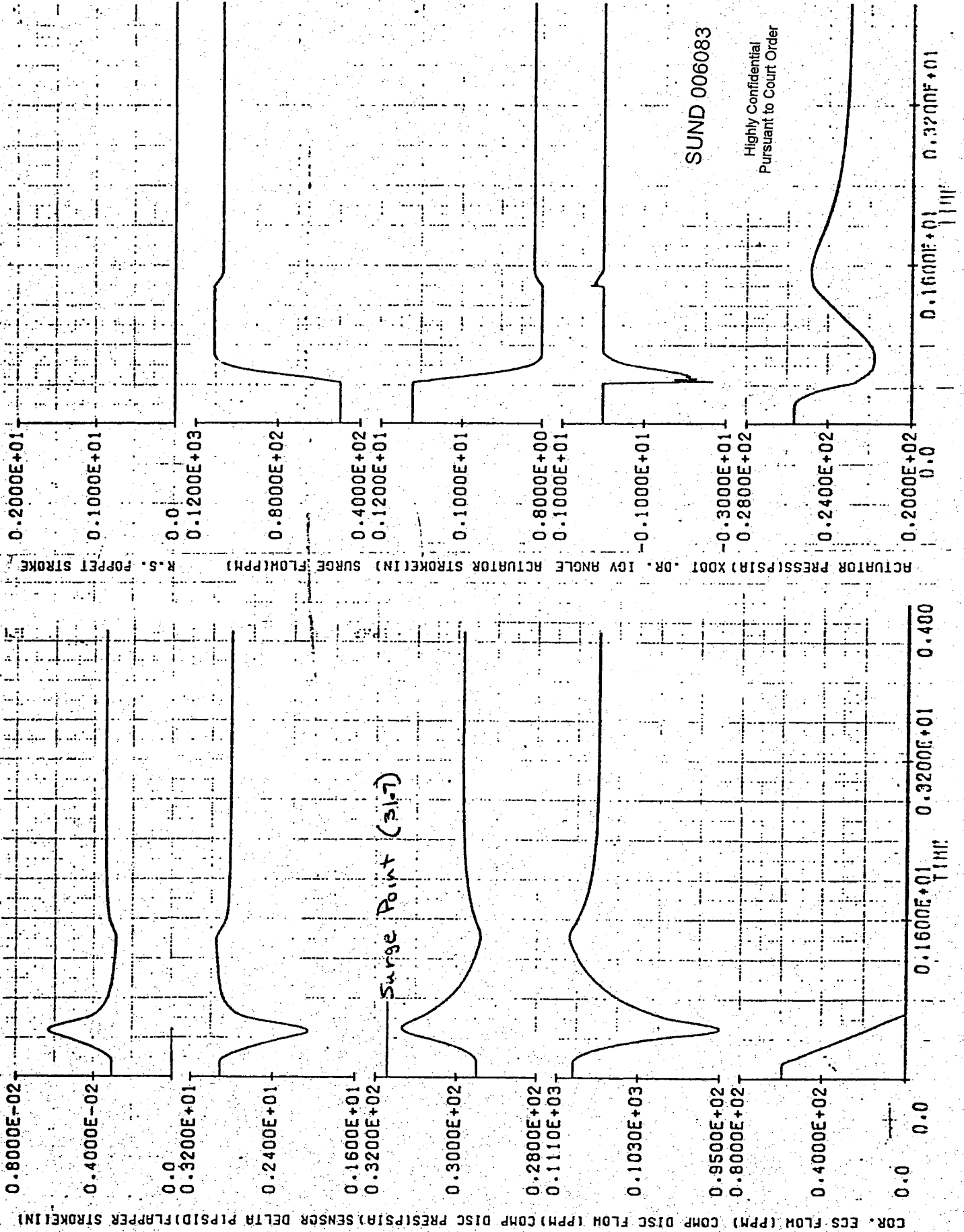




FIGURE 20. TWO PACK ECS FLOW SHUTOFF TRANSIENT  
67°F, 15,000 FT, MAX. MODE

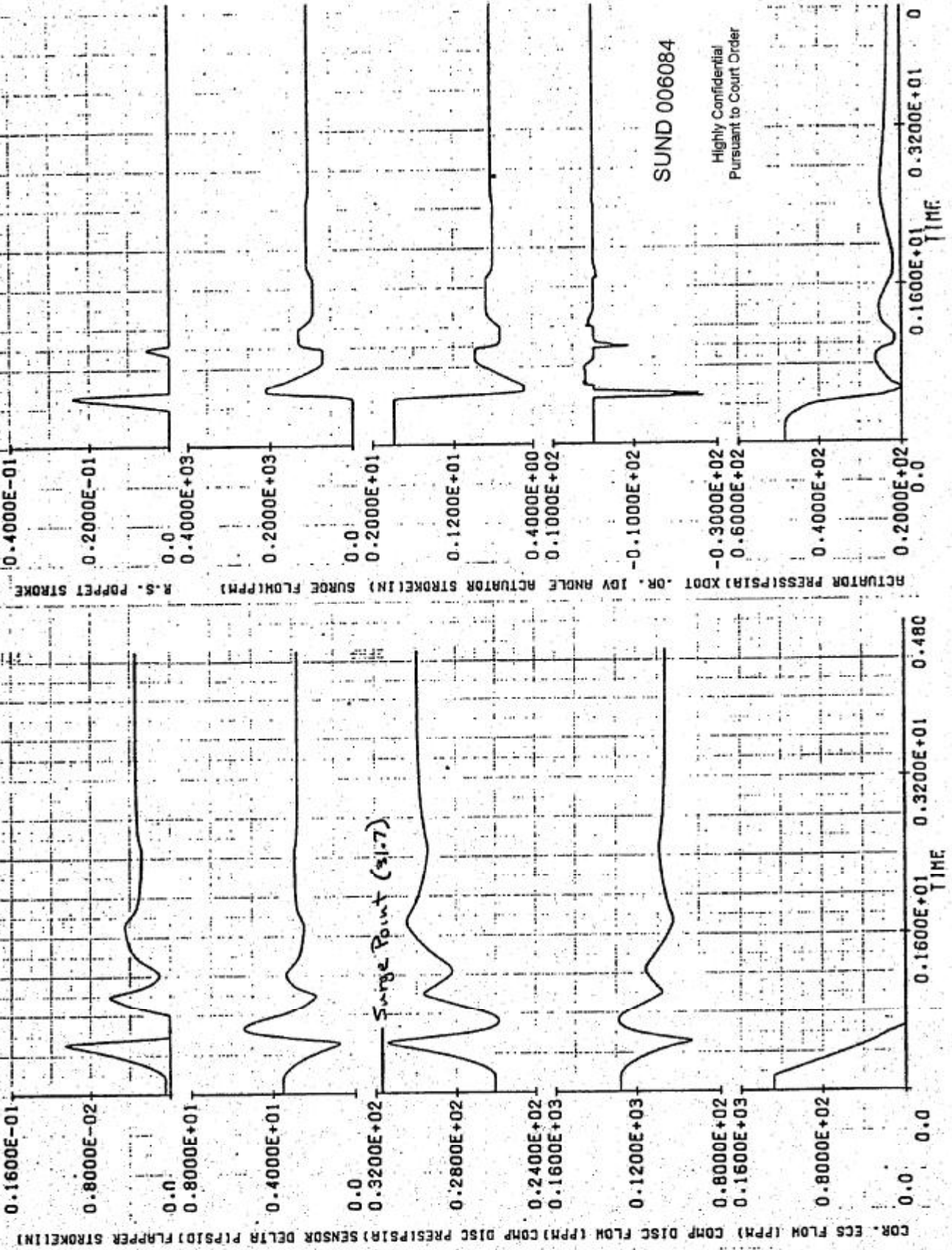




FIGURE 21. TWO PACK ECS FLOW SHUTOFF TRANSIENT

103°F DAY, SEA LEVEL, MIN. MODE

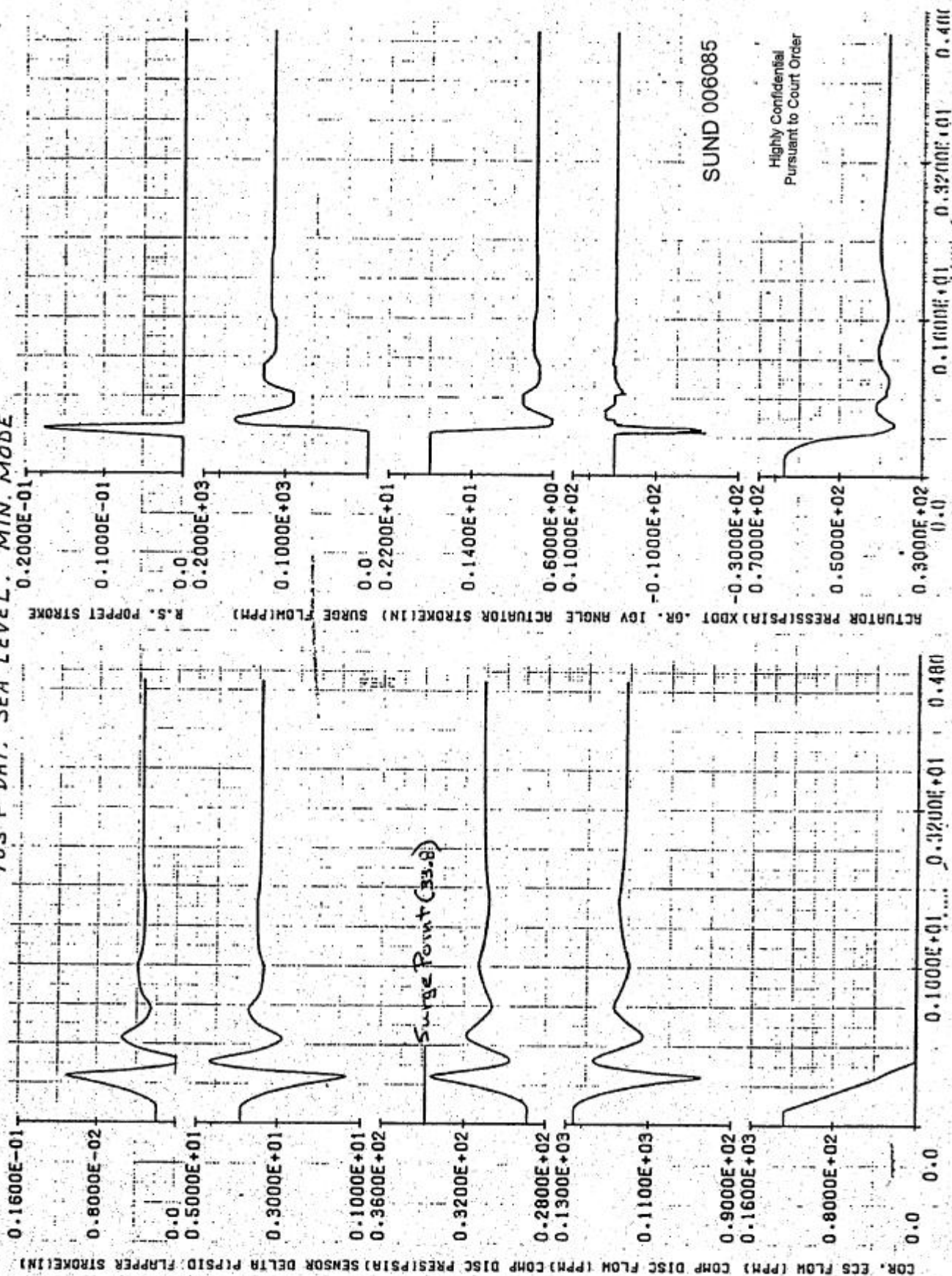
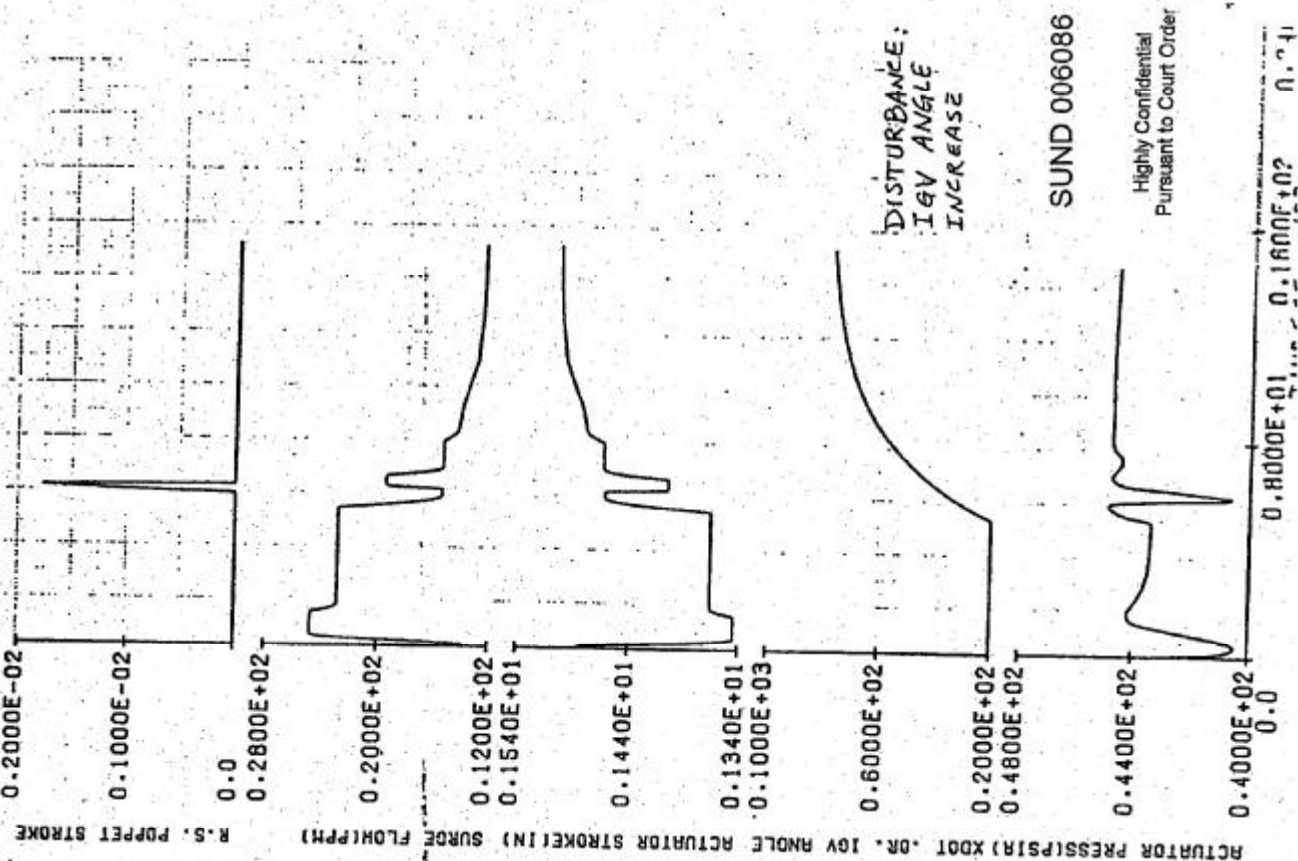
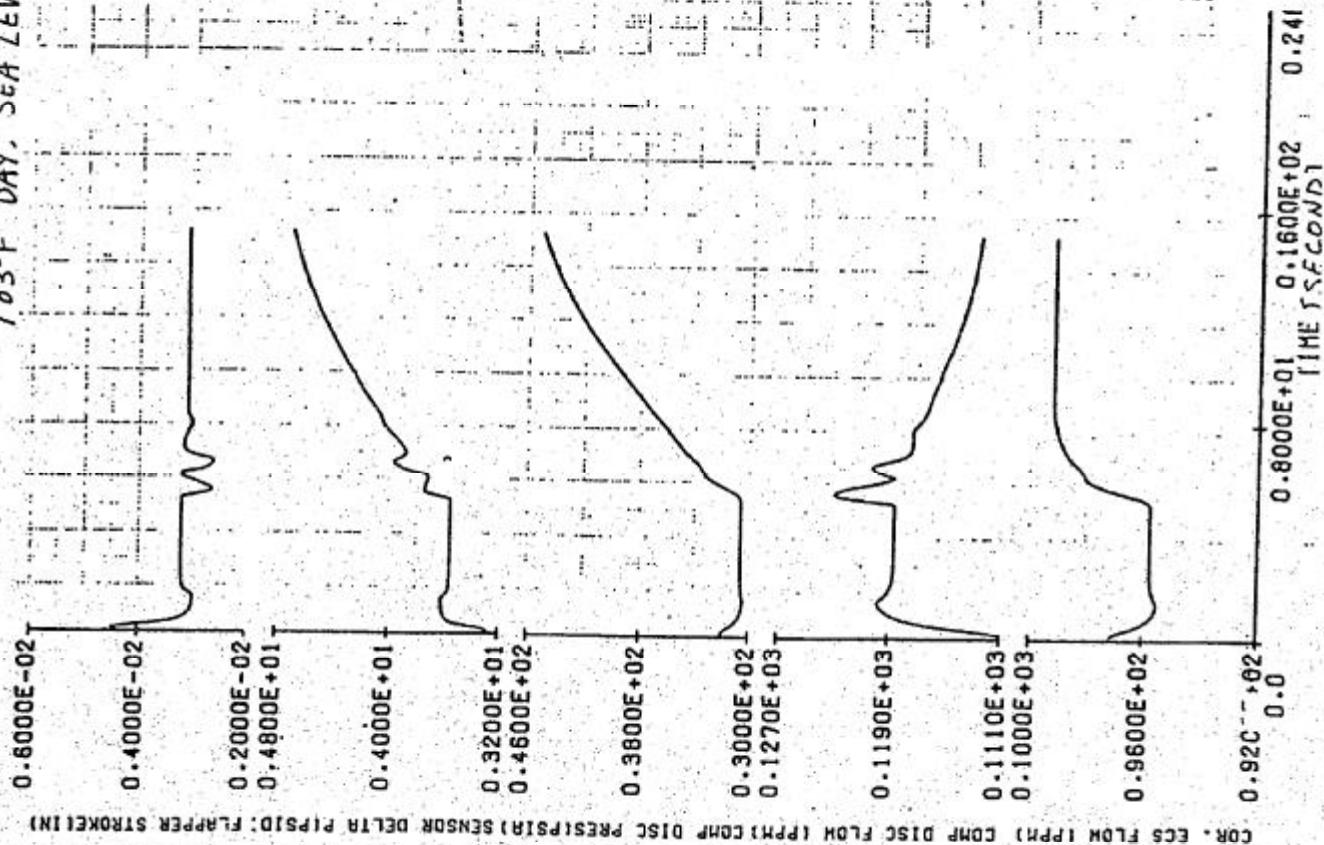




FIGURE 22. ENGINE STATION TUP TRANSIENT  
103°F DAY, SEA LEVEL, MIN. TO MAX. MODE



DISTURBANCE:  
IGV ANGLE  
INCREASE

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L1011 APV Surge Sys. Performance

min. to max. 16V transient (25psia to 43psia)

Wgt. = 190 lbs at 43psia

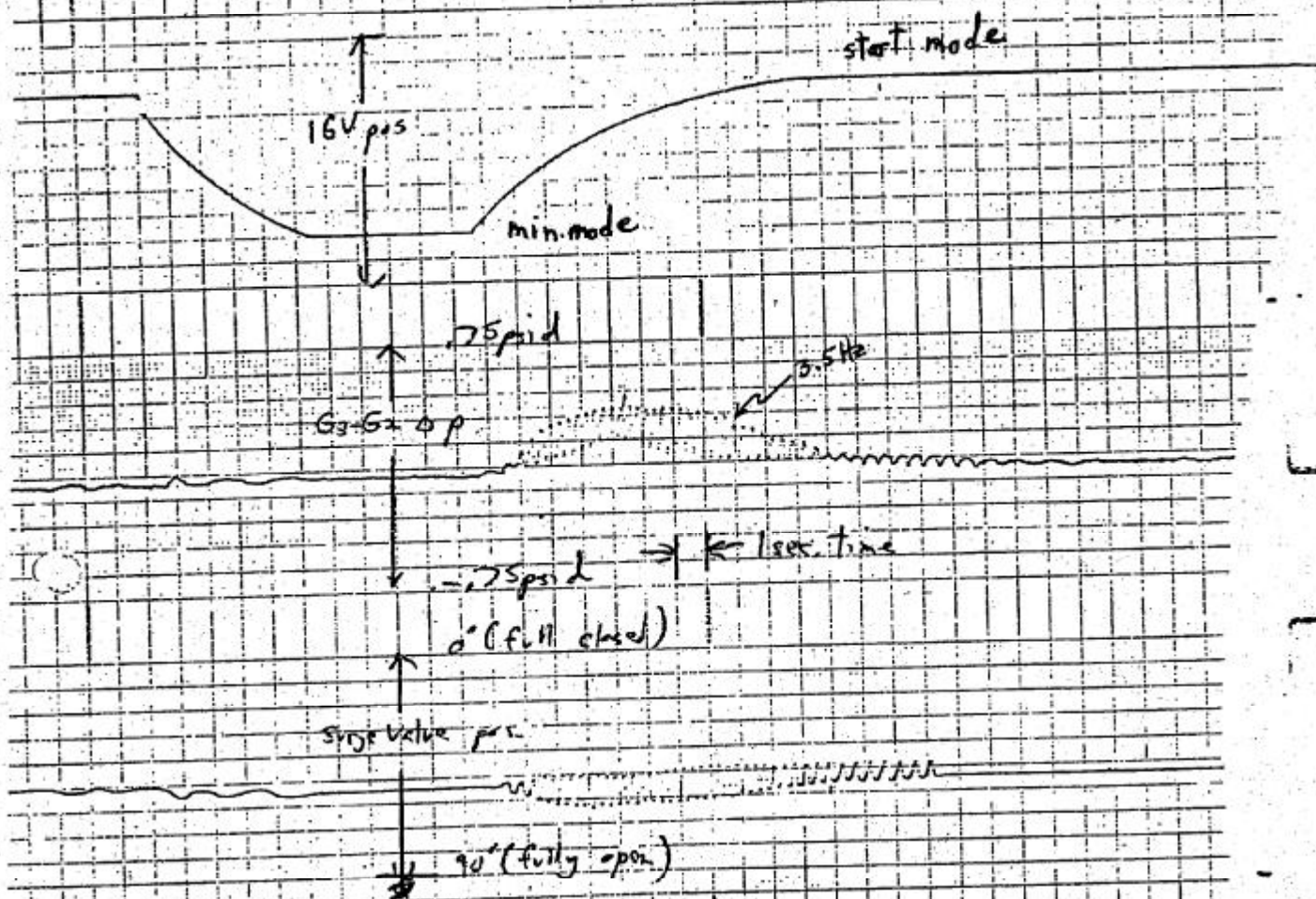
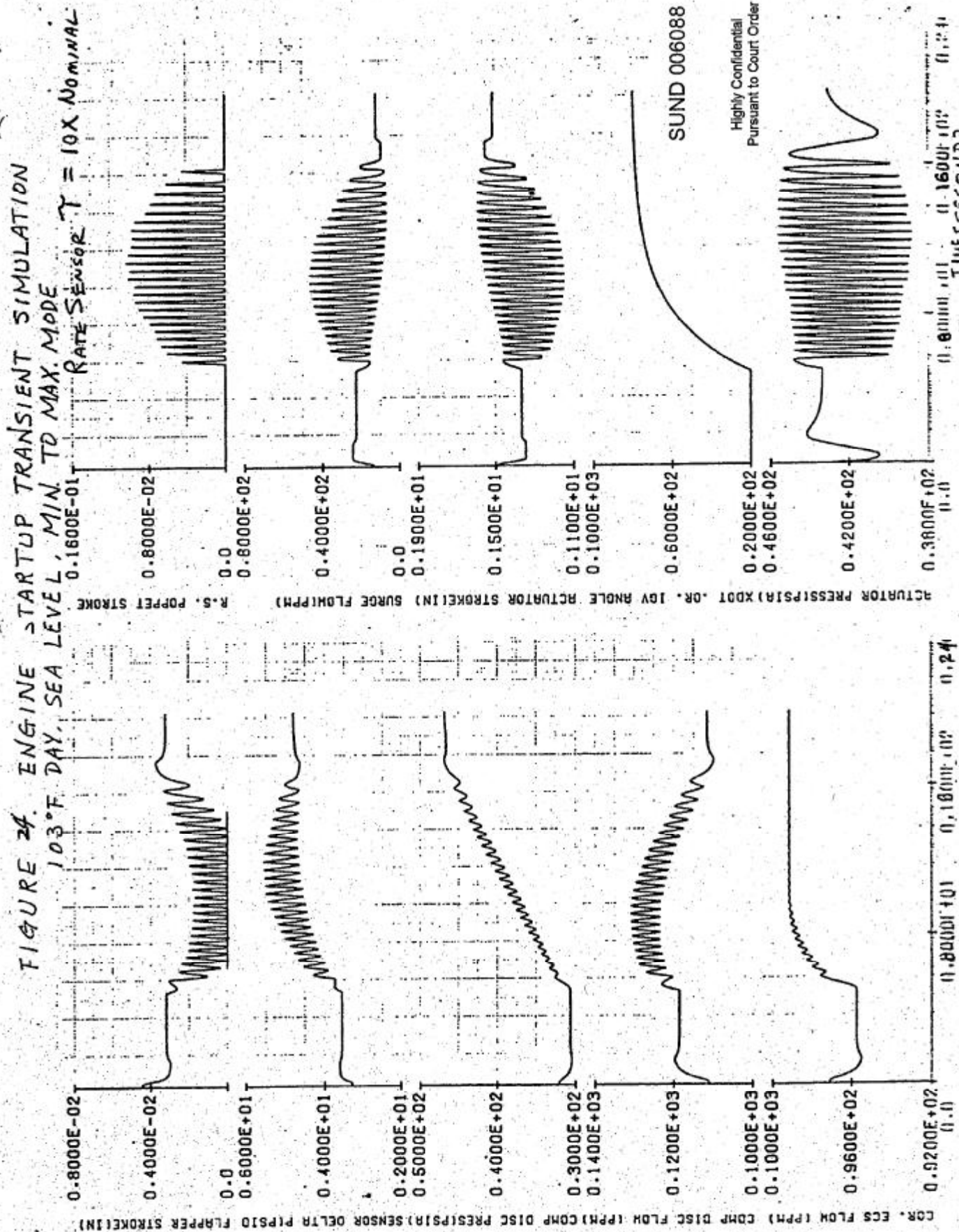


FIGURE 23. ENGINE STARTUP TEST DATA

SUND 006087





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2. Design Schematic of Surge Control System for Modified APU, C. A. Glenn, June 20, 1980.
3. CD 701, "L-1011 APU Surge Control 3.5:1 Boosted Venturi Signal Probe Evaluation", by M. Spadafora, August 26, 1975.
4. CD 691, "L-1011 APU Surge Control Redesign Feasibility Study", by M. Spadafora, May 30, 1975.
5. CD 428, "L-1011 APU Surge Control Dynamic Analysis" by J. E. Lundquist, August 18, 1970.
6. HSER 7366 report, page 18, August 1977.
7. Data provided by N. Lockwood of ECS Design Group, on April 21, 1980.
8. Data provided by R. B. Goodman of ECS Design Group, on March 27, 1980.